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Reports from the 1990 Professional Seminar

HEMI-SYNC® AND THE BRAIN ENTRAPMENT PROCESS: MYTH OR REALITY?

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Dr. Sadigh began by describing his personal interest in extraordinary states of consciousness. This interest, and the current plethora of mind-brain devices and techniques available, led him to begin investigating some of them in his neuropsychological lab. Utilizing a 16-channel HZI Dynamic Brain Mapping Unit, he tested subjects' responses to the devices to determine if brain-wave states were altered in accordance with the manufacturers' claims. Results were consistently disappointing. The data obtained did not validate claims of hemispheric synchronization or demonstrate a predominance of brain waves in the targeted ranges.

While participating in a GATEWAY VOYAGE® at The Monroe Institute®, Dr. Sadigh experienced a personal Hemi-Sync session in the laboratory isolation booth. The subsequent burst of creative energy inspired two projects: first, to write music; and second, to demonstrate "what is happening with Hemi-Sync." Is the entrainment process, defined by Dr. Sadigh as influencing the brain to produce specific states, a reality or a myth? He set out to discover the answer.

Using slides to illustrate the visual displays available on his brain-mapping system, Dr. Sadigh demonstrated the ease of pattern recognition with a color-coded topographic map versus conventional EEGs' "squiggly lines." Stressing the importance of the secondary and tertiary, as well as primary, brain-wave activity as an indicator of brain state, he displayed a topograph showing a predominance of Theta waves as the primary activity in comparison to a second topograph showing predominantly Alpha waves as the secondary activity.

Shortly after his visit to TMI, Dr. Sadigh spoke with a biologist who had meditated regularly for about 15 years. The biologist said that after five years of practice he began to "feel" his brain becoming synchronized during meditation. Dr. Sadigh suggested checking it out on the brain

mapper. Using a single-subject research design the biologist was brain mapped before, during, and after entering his meditative state.

To Dr. Sadigh's great excitement, topographs revealed hemispheric synchrony both in primary and secondary activity during meditation but not during the pre- or post-test period. Furthermore, while primary activity was in the Alpha range, secondary activity was predominantly Theta. The Theta was of particular interest because, not only is it difficult to learn to produce a Theta state, but sustaining it over time is rare.

Armed with documentation on the adept meditator, Dr. Sadigh began brain mapping subjects using Hemi-Sync. His first subject was a female volunteer who had attended a GATEWAY VOYAGE at TMI and worked with Hemi-Sync tapes for about two months. Using the same single-subject research model, the pretest showed an asynchronous mixture of Alpha, Beta, and Theta. He then introduced the *Introduction to Focus 10* Hemi-Sync tape. Results were astounding: the subject's topograph showed primary Theta activity, and secondary Alpha activity—both synchronized hemispherically. The posttest showed a return to an asynchronous mixture of Alpha and Theta waves.

The next subject, a male, had attended the GATEWAY VOYAGE two to three years ago, and had used a few H-PLUS series tapes since, although not regularly. His pre- and post-tests revealed asynchronous Theta and Alpha activity. During Hemi-Sync introduction (the *Free Flow 12* tape) the subject produced primary Beta and secondary Alpha activity, again, synchronized hemispherically. Subsequently, Dr. Sadigh decided to replicate the *Free Flow 12* study with the same subject. Results exactly duplicated those in the first test: asynchronous Theta and Alpha in the pre-test and post-test, and synchronous Beta and Alpha during Hemi-Sync. Because the subject had experienced H-PLUS tapes, Dr. Sadigh tried a brief experiment. During the post-test period, he made a verbal suggestion to the subject: "Eleven, Access Channel open," which is an encoding or verbal cue present on all H-PLUS tapes. In response, the subject produced synchronous primary Beta and secondary Alpha waves. This response, to a verbal cue only, suggests another level of entrainment: that Hemi-Sync, in addition to stimulating targeted brain states, fosters the ability of an individual to reproduce that state at will.

These and other tests performed by Dr. Sadigh generate as many questions as answers. Dramatic changes in synchrony were present in all situations. But what about the intimate relationship between subjective experiences and brain-wave activity? What is the significance of patterns of amplitude within the frequency ranges during hemispheric synchronization? What happens when a subject "clicks out," or experiences a lapse of consciousness during Hemi-Sync? After compiling more data with additional subjects, Dr. Sadigh will offer it to other researchers. He also hopes eventually to publish some of his results.

To conclude his formal presentation, Dr. Sadigh shared some philosophical thoughts on the implications of this research. While the presence of measurable brain-wave activity supports the concept that human beings transmit information, a compatible notion occurs: that we are, in fact, highly complex receivers; that our brains work to “tune in” to selected frequency transmissions as our brain states change. If this is so, what is the source of these transmissions? It is this ultimate question which he intends to pursue.